Form 1449 (Modified) **Information Disclosure Statement By Applicant** (Use Several Sheets if Necessary)	Atty Docket No. CAMIP005 Applicant: Ewing et al. Filing Date March 15, 2001	Application No.: 09/811,283 Group ~~1635~~ 1631

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
AK	A1	5,798,275	8/25/98	Kauvar et al.			
AK	A2	5,859,972	1/12/99	Subramaniam et al.			
AK	A3	6,081,766	6/27/00	Chapman et al.			

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation Yes	Translation No
AK	B1	WO 00/08205	02/17/00	PCT				

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
AK	C1	Karickhoff et al., "Predicting Chemical Reactivity by Computer," Environmental Toxicology and Chemistry, Vol. 10, pp. 1405-1416 (1991)

Examiner Andrew Kennedy	Date Considered Jan. 29, 2004

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified)	Atty Docket No. CAMIPOO5	Application No. 09/811,283
Information Disclosure Statement By Applicant	Applicant: Ewing et al.	
(Use Several Sheets if Necessary)	Filing Date March 15, 2001	Group ~~1635~~ 1631

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	1A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation Yes	Translation No
MSM	1B	WO 95/18969	07/13/95	PCT	60/N	33/53		
	1C							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
MSM	1D	Bradford, M. M., *et al., "A Rapid and Sensitive Method for the Quantitation of Microgram Quantities of Protein Utilizing the Principle of Protein-Dye Binding,"* ANAL. BIOCHEM., (1976) 72:248-54
MSM	1E	Burka, L. T., *et al., "Mechanism of Cytochrome P-450 Catalysis. Mechanism of N-Dealkylation and Amine Oxide Deoxygenation,"* J. AM. CHEM. SOC., (1985) 107:2549-51
MSM	1F	Burka, L. T., *et al., "Mechanisms of Hydroxylation by Cytochrome P-450: Metabolism of Monohalobenzenes by Phenobarbital-Induced Microsomes,"* PROC. NATL. ACAD. SCI. USA (1983) 80:6680-4
MSM	1G	Cleland, W. *W., "Partition Analysis and the Concept of Net Rate Constants as Tools in Enzyme* Kinetics," BIOCHEMISTRY, (1975) 14(14):3220-4
MSM	1H	Cleland, W. W., *"The Use of Isotope Effects to Determine Transition-State Structure for Enzymic Reactions,"* METHODS ENZYMOL., (1982) 87:625-41
MSM	1I	Cupp-Vickery, J.R. *et al., "Structure of Cytochrome P450eryF Involved in Erythromycin Biosynthesis,"* STRUCTURAL BIOLOGY, (1995) 2(2):144-53
MSM	1J	Dinnocenzo, J. P., *et al., "On Isotope Effects for the Cytochrome P-450 Oxidation of Substituted NN-Dimethylanilines,"* J. AM. CHEM. SOC.,(1993) 115:7111-6
MSM	1K	Franchetti, P., *et al., "Furanfurin and Thiophenfurin: Two Novel Tiazofurin Analogues. Synthesis, Structure, Antitumor Activity, and Interactions with Inosine Monophosphate Dehydrogenase,"* J. MED. CHEM., (1995) 38:3829-37
MSM	1L	Gonzalez, F. J., *et al., "Human Cytochromes P450: Problems and Prospects,"* TIPS Reviews, (1992) 13:346-52
MSM	1M	Gonzalez, F.J., *et al., "Expression of Mammalian Cytochrome P450 Using Paccinia Virus,"* METHODS ENZYMOL., (1991) 206:85-92

Examiner	MG Moran	Date Considered	4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy Jan 29, 2004

Form 1449 (Modified) **Information Disclosure Statement By Applicant** (Use Several Sheets if Necessary)	Atty Docket No. CAMIP005 Applicant: Ewing et al. Filing Date March 15, 2001	Application No.: 09/811,28 Group ~~1635~~ 1631

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	2A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	2B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
MM	2C	Grogan, J., *et al., "Modeling Cyanide Release from Nitriles: Prediction of Cytochrome P450 Mediated Acute Nitrile Toxicity,"* CHEM. RES. TOXICOL., (1992) 5(4):548-52
MM	2D	Groves, J. T., *et al., "Aliphatic Hydroxylation by Highly Purified Liver Microsomal Cytochrome P-450. Evidence for a Carbon Radical Intermediate,"* BIOCHEMICAL & BIOPHYSICAL RESEARCH COMMUNICATIONS (1978) 81(1):154-60
MM	2E	Groves, J.T., *et al., "Hydroxylation by Cytochrome P-450 and Metalloporphyrin Models. Evidence for Allylic Rearrangement,"* J. AM. CHEM. SOC., (1984) 106: 2177-81
MM	2F	Guengerich, F. P., *et al., "Role of Human Cytochrome P-450 IIEI in the Oxidation of Many Low Molecular Weight Cancer Suspects,"* CHEM. RES. TOXICOL., (1991) 4:168-79
MM	2G	Guengerich, F. P., *et al., "Evidence for a 1-Electron Oxidation Mechanism in N-Dealkylation ofN,N-Dialkylanilines by Cytochrome P450 2B1,"* J. BIOL. CHEM., (1996) 271(44):27321-9
MM	2H	Hammond, G. S., "A *Correlation ofReaction Rates,"* J. AM. CHEM. SOC., (1955) 77(2):334-40
MM	2I	Hanzlik, R.P., *et al., "Intramolecular Kinetic Deuterium Isotope Effects on Microsomal Hydroxylation and Chemical Chlorination of Toluene-a-dl and Toluene-a,a-d2,"* J. AM. CHEM. SOC., (1985) 107:7164-7
MM	2J	Harada, N., *et al., "Kinetic Isotope Effects on Cytochrome P-450-Catalyzed Oxidation Reaction,"* J. BIOL. CHEM., (1984) 259(5):3005-10
MM	2K	Hasemann, C.A., *et al., "Structure and Function of Cytochromes P450: A Comparative Analysis of Three Crystal Structures,"* STRUCTURE, (1995) 3(1):41-62
MM	2L	Hasemann, C.A., et *al., "Crystal Structure and Refinement of Cytochrome P450terp at 2-3 A Resolution,"* J. MOL. BIOL., (1994) 236:1169-85

Examiner MG Moran	Date Considered 4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy Jan 29, 2004

Form 1449 (Modified)	Atty Docket No.	Application No.:
	CAMIPOO5	09/811,283
Informati n Disclosure Statement By Applicant	Applicant: Ewing et al.	
	Filing Date	Group
(Use Several Sheets if Necessary)	March 15, 2001	~~1635~~ 1631

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	3A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	3B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
MGM	3C	Heberger, K., *"Linear Free Energy Relationships in Radical Reactions. II Hydrogen Abstraction From Substituted Toluenes by TERT-Butyl, TERT-Butoxyl and Tert-Butylperoxyl Radicals,"* J. PHYS. ORG. CHEM., (1994) 7:244-50
MGM	3D	Hermes, J.D., *et al., "Use of Multiple Isotope Effects to Determine Enzyme Mechanisms and Intrinsic Isotope Effects. Malic Enzyme and Glucose-6-phosphate Dehydrogenase,"* BIOCHEMISTRY, (1982) 21:5106-1428
MGM	3E	Hjelmeland, L. M., *et al., "Intramolecular Determination of Primary Kinetic Isotope Effects in Hydroxylations Catalyzed by Cytochrome P-450,* " BIOCHEM. BIOPHYS. RES. COMMUN., (1977) 76:541-9
MGM	3F	Jones, J. *et al., "Predicting The Rates And Regioselectivity of Reactions Mediated By The P450 Superfamily,"* METHODS IN ENZYMOLOGY, (1996) 272:326-35
MGM	3G	Jones, J. P., *et al., "The Separation of the Intramolecular Isotope Effect for the Cytochrome P-450 Catalyzed Hydroxylation of n-Octane into Its Primary and Secondary Components,"* J. AM. CHEM. SOC., (1987) 109(7):2171-3
MGM	3H	Jones, J.P., *et al., "Stereospecific Activation of the Procarcinogen Benzo[a]pyrene: A Probe for the Active Sites of the Cytochrome P450 Superfamily,"* BIOCHEMISTRY, 1995, 34:6956-61
MGM	3I	Jones, J.P., *et al., "The Binding and Regioselectivity of Reaction of (R)-and (S)-Nicotine with Cytochrome P-450cam: Parallel Experimental and Theoretical Studies,"* J. AM. CHEM. SOC., (1993) 115:381-7
MGM	3J	Jones, J.P., *et al., Accelerated Communication: Three Dimensional Quantitative Structure- Activity Relationship for Inhibitors of Cytochrome P4502C9,"* (1996) DRUG METAB. DISPOS., 24(1):1-6
MGM	3K	Karki, S.B., *et al., "On the Mechanism of Amine Oxidations by P450,"* Xenobiotica, (1995), 25(7):711-24

Examiner	M G Moran	Date Considered	4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kenedy Jan 29, 2004

Form 1449 (Modified) **Information Disclosure Statement By Applicant** (Use Several Sheets if Necessary)	Atty Docket No. CAMIPO05 Applicant: Ewing et al. Filing Date March 15, 2001	Application No.: 09/811,283 Group ~~1635~~ 1631

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	4A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	4B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
MM	4C	Karki, S.B., *et al., "Mechansim of Oxidative Amine Dealkylation ofSubstituted N,N-Dimethylanilines by Cytochrome P-450: Application of Isotope Effect Profiles,"* J. AM. CHEM. SOC., (1995) 117(13):3657-64
MM	4D	Kim, S.S.; *et al., "Comparative Hammett Studies of Imidoyl, Benzylic, Aldehydic Hydrogens Transfer and Related Reaction by t-Butoxyl Radical,"* TETRAHEDRON LETT., (1985) 26(7): 891-4
MM	4E	Kobayashi, Y., *et al., "Probing the Active Site of Cytochrome P450 2B1: Metabolism of 7- Alkoxycoumarins by the Wild Type and Five Site-Directed Mutants,"* BIOCHEMISTRY, (1998) 37(19):6679-88
MM	4F	Korzekwa, K. R., *et al., "Theoretical Studies on Cytochrome P-450 Mediated Hydroxylation: A Predictive Model for Hydrogen Atom Abstraction,"* J. AM. CHEM. SOC., (1990) 112:7042-6
MM	4G	Korzekwa, K., *et al., "The Use of Brauman's Least Squares Approach for the Quantification of Deuterated Chlorophenols,"* BIOMED. & ENVIRON. MASS SPECTROM., (1990) 19:211-7
MM	4H	Korzekwa, K.R., *et al., "Predicting the Cytochrome P450 Mediated Metabolism of Xenobiotics,"* PHARMACOGENETICS, (1993) 3:1-18
MM	4I	Lindsay Smith, J.R., et *al., "Model Systems for Cytochrome P450 Dependent Mono-Oxygenases. Part 2. [1,2] Kinetic Isotope Effects for the Oxidative Demethylation of Anisole and [Me-$^2H_3$] Anisole by Cytochrome P450 Dependent Mono-Oxygenases and Model Systems,"* J. CHEM. SOC. PERKIN TRANS. II, (1983) 5:621-8
MM	4J	Macdonald, T. L., *et al., "Oxidation of Substituted N,N-Dimethylanilines by Cytochrome P-450: Estimation of the Effective Oxidation-Reduction Potential of Cytochrome P-450,"* (1989) BIOCHEMISTRY, 28:2071-7
Examiner	MG Moran	Date Considered 4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy Jan 29, 2004

Form 1449 (Modified)	Atty Docket No. CAMIPOO5	Application No.: 09/811,283
Information Disclosure Statement By Applicant	Applicant: Ewing et al.	
(Use Several Sheets if Necessary)	Filing Date March 15, 2001	Group 1631 ~~1635~~

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	5A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation Yes	Translation No
	5B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
MAM	5C	Manchester, J.I., *et al., "A New Mechanistic Probe for Cytochrome P450:An Application of Isotope Effect Profiles,"* J. AM. CHEM. SOC., (1997) 119:5069-70
MAM	5D	Nelson, D.R., *et al., P450 Superfamily: Update on New Sequences, Gene Mapping, Accession Numbers and Nomenclature,"* PHARMACOGENETICS, (1996) 6:1-42
MAM	5E	Northrop, D.B., *"Deuterium and Tritium Kinetic Isotope Effects on Initial Rates,"* METHODS ENZYMOL., (1982) 87:607-25
MAM	5F	Northrop, D.B., *"Steady-State Analysis of Kinetic Isotope Effects in Enzymic Reactions,"* Biochemistry, (1975) 14(12)2644-51
MAM	5G	Omura, T., *et al., "The Carbon Monoxide-Binding Pigment of Liver Microsomes,"* J. BIOL. CHEM., (1964) 239(7):2370-8
MAM	5H	Poulos, T. L., *et al., "High-Resolution Crystal Structure of CytochromeP450cam,"* J. MOL. BIOL., (1987) 195:687-700
MAM	5I	Ravichandran, K. G., *et al., "Crystal Structure of Hemoprotein Domain of P450BM-3, a Prototype for Microsomal P450's,"* SCIENCE, (1993) 261:731-6
MAM	5J	Sakurai, H., *et al., "Polar and Solvent Effects on Homolytic Abstraction of Benzylic Hydrogen of Substituted Toluenes by t-Butoxy Radical,"* J. AM. CHEM. SOC., (1967) 89(2):458-60
MAM	5K	Shimoji, M., *et al., "Design of a Novel P450: A Functional Bacterial--Human Cytochrome P450 Chimera,"* BIOCHEMISTRY, (1998) 37:8848-52
MAM	5L	Silver, E.H., et al., "Structural *Considerations in the Metabolism of Nitriles to Cyanide* In Vivo," DRUG METAB. DISPOS., (1982) 10(5):495-8
MAM	5M	Smith, P. B., *et al., "4-Ipomeanol and 2 Aminoanthracene Cytotoxicity in C3H11IOTll2 Cells Expressing Rabbit Cytochrome P450 4B1,"* BIOCHEM. PHARMACOL., (1995) 50(10):1567-75

Examiner MA Khan	Date Considered 4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy

Jan 29, 2004

Form 1449 (Modified)	Atty Docket No.	Application No.
Information Disclosure Statement By Applicant	CAMIPOO5 Applicant: Ewing et al.	09/811,283
(Use Several Sheets if Necessary)	Filing Date March 15, 2001	Group ~~1635~~ 1631

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	6A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	6B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
MQM	6C	Szklarz, G. D., *et al., "Site-Directed Mutagenesis as a Tool for Molecular Modeling of Cytochrome P450 2B1,"* BIOCHEMISTRY, (1995) 34:14312-22
MQM	6D	Tassaneeyakul, W., *et al., "Human Cytochrome P450 Isoforfn Specificity in the Regioselective Metabolism of Toluene and o-, m- and p-Xylene,"* J. PHARMACOL. EXP. THER., (1996) 276(1):101-8
MQM	6E	Tyson, C. A., *et al., "The Roles of Putidaredoxin and P450cam in Methylene Hydroxylation,"* J. BIOL. CHEM., (1972) 247(18):5777-84
MQM	6F	Watanabe, Y., *et al., "Kinetic Study on Enzymatic S-Oxygenation Promoted by a Reconstituted System with Purified Cytochrome P-450,"* TETRAHEDRON LETT., (1980) 21:3685-8
MQM	6G	Westheimer, F. H., *"The Magnitude of the Primary Kinetic Isotope Effect for Compounds of Hydrogen and Deuterium,"* CHEM. REV., (1961) 61(3):265-73
MQM	6H	White, R. E., *et al., "Oxygen Activation by Cytochrome P-450,"* ANN. REV. OF BIOCHEM., (1980) 49:315-56
MQM	6I	White, R.E., *et al., "Active Site Mechanics of Liver Microsomal Cytochrome P-450,"* ARCH. BIOCHEM. BIOPHYS., (1986) 246(1):19-32
MQM	6J	White, R.E., *et al., "Stereochemical Dynamics of Aliphatic Hydroxylation by Cytochrome P-450,"* J. AM. CHEM. SOC., (1986) 108: 6024-31
MQM	6K	Wislocki, P.G., *et al., "Reactions Catalyzed by the Cytochrome P-450 System, "* ENZYMATIC BASIS OF DETOXICATION, (1980) 1:135-82
MQM	6L	Yin, H., *et al., "Designing Safer Chemicals: Predicting the Rates of Metabolism of Halogenated Alkanes, "* PROC. NATL. ACAD. SCI. USA, (1995) 92(24):11076-80
MQM	6M	Zerner, Michael C., *"Semiempirical Molecular Orbital Methods,"* REVIEWS IN COMPUTATIONAL CHEMISTRY II, Chapter 8, 313-365 (1991)

Examiner	MQ Moran	Date Considered	4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy

Jan 29, 2004

Form 1449 (Modified)	Atty Docket No.	Application No.
Information Disclosure Statement By Applicant	CAMIPOO5 Applicant: Ewing et al.	09/811,283
(Use Several Sheets if Necessary)	Filing Date March 15, 2001	Group ~~1635~~ 1631

U.S. Patent Documents

Examiner Initial	No.	Patent No.	Date	Patentee	Class	Sub-class	Filing Date
	7A						

Foreign Patent or Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Country or Patent Office	Class	Sub-class	Translation	
							Yes	No
	7B							

Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication
MGM	7C	International Search Report for PCT/LTS99/17713 dated 11 November 1999
MGM	7D	Abstract No. XP-002122407, P84 to Johnson et al., "Automated Modeling Predicts Active Site Geometries Consistent with the Regiospecificity of P450s 2C3v and 2C5 for Progesterone Hydroxylation," FASEB Journal 11(9):P785 (1997)
MGM	7E	~~Korzckwa and~~ Gillette, et al. "Overview: Theoretical Aspects of Isotope Effects on the Pattern of Metabolites Formed by Cytochrome P-450," Biological Reactive Intermediates IV, Witmer et al., Eds. Plenum Press, NY (1990)
MGM	7F	Korzekwa et al., "Theory for the Observed Isotope Effects from Enzymatic Systems that Form Multiple Products via Branched Reaction Pathways: Cytochrome P-450," Biochemistry 28: 9012 (1989).
	7G	
	7H	
	7I	
	7J	
	7K	

Examiner	Date Considered
MG Moran	4/15/03

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Andrew Kennedy Jan 29, 2004